

Work Order ID **56244**



Page 1

Wednesday, February 17, 2010 11:03:02 AM

Item ID: D044-715-011

Accept



Setup Start



Revision ID:

Stop



Item Name: R44 Cargo Mirror

Start Date: 2/18/2010 Start Qty: 4.00



Cust Item ID:

Required Date: 4/2/2010 Req'd Qty: 4.00



Customer:

Reference:

Approvals:

Process Plan:

[Signature]

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start



Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D3243

Rev A

IIN-D044-715

Rev A

100

0.00



DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy bluefile & type labels per PPPD044-715-011

CHG003

6061 . 063

6/10/04/20

[Signature] for CL 10/04/07

110

0.00



FLOW WATER JET

Waterjet

Memo

0.00

FLOW CNC Waterjet

1-Cut as per Dwg D3243

Dwg Rev: A

Prog Rev: A

10-2-22

(13)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

120

QC2- Inspect parts off machine FAI/FAIB

0.00



QC

Memo

0.00

Quality Control

13 10-2-22

130

QC8- Inspect parts - second check

0.00



QC

Memo

0.00

Quality Control

27 8/10/02/23

13

140

NC BRAKE

0.00



Brake NC

Memo

0.00

Brake NC

Bend as per Dwg D3243

28 10/03/18

13

W/O:		WORK ORDER CHANGES					
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Reference:

Cust Item ID:

Customer:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run

Start

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

150



QC

Quality Control

QC6- Inspect dimensions to drawing

0.00

0.00

Memo

Sub 2/18

(X13)

160



HandFinish

Hand Finishing

Chemical Conversion Coat per QSI005 4.1

0.00

0.00

Memo

JL 10/03/18

(X13) X

170



QC

Quality Control

QC3- Inspect Part Finish

0.00

0.00

Memo

9/10/03/24 (13)

W/O:		WORK ORDER CHANGES					
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Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

180



Small Fab

Small Fab

0.00

Memo

0.00

Small Fab

Assemble as per Dwg d3243

8/10/03/24 (13)

190



QC

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

Quality Control

8/10/03/24

(43)

200



Powdercoat

Black Sandtex(Ref:4.3.5.7) per QSI005 4.3

0.00

Memo

0.00

Powder Coating

plug holes with screws before powdercoat

START TIME: 1:15pm
OVEN TEMPERATURE: 320°F
FINISH TIME: 1:45pm

9/10/03/30

(X13) X

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Run Start

Stop

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

210

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

BR 10-3-30 (13) 4.

220

Pick Kit

0.00



Packaging

Memo

0.00

Packaging

pick kit for 4 only

10-4-20 (40) 5/ PTO

230

QC4- 100% Inspect kits for completeness

0.00



QC

Memo

0.00

Quality Control

8/10/20

(44)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
10/1/04	220	stock balance of D3243.041 x9 adjust inventory 57227 Per 1/4/99				Le	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
240	Packaging	0.00							
	Packaging								
Packaging	Memo	0.00							
	Identify and pack for shipping as per PPP D044-715-011								
	Location: <i>MSD</i>								
250	QC21- Final Inspection - Work Order Release	0.00							
	QC								
Quality Control	Memo	0.00							

10/4/20 *(Y)*

10/4/21 *(J)*

MF
10-4-21

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Picklist Print

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Page 1

Work Order ID: 56244

Parent Item: D044-715-011

Parent Item Name: R44 Cargo Mirror


Start Date: 2/18/2010

Required Date: 4/2/2010

Comments: IPP Rev:A 04.02.18 New issue KJ/JLM
IPP Rev:B 06-04-28 Manufactured on Water Jet JLM
IPP Rev:C 08-06-10 as per ECN1195p DD verified by:EC

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/	Replacement	Mfg/	Bin	Primary	Last	Route	Unit of	Qty on	Remaining	Qty	Date	Status
M6061T6S.063		Purchased	No			110	sf	302.7841	2.1491	7.		
												
6061-T6 .063 Sheet												

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

MAT

302.7841211

110551

25.1841211

113608

277.6

FE-032-EF

Purchased

No

180

Each

121.0000

16.0000

Inserts

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

121

108546

21

110836

100

D1048

Manufactured

No

230

Each

26.0000

8.0000

Saddle

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST10

26

55027

26

10-2-22

13

110551

10/03/24

1
51

10-4-20 SP

8

Dart Aerospace Ltd

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Comments: IPP Rev:A 04.02.18 New issue KJ/JLM
IPP Rev:B 06-04-28 Manufactured on Water Jet JLM
IPP Rev:C 08-06-10 as per ECN1195p DD verified by:EC

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/	Replacement	Mfg/	Bin	Primary	Last	Route	Unit of	Qty on	Remaining	Qty	Date	Status
D1049		Manufactured	No			230	Each	25.0000	8.0000			
Saddle												

BS284 10-4-2010

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST002

5

53485

5

Main Warehouse

ST10

20

55028

20

D2010-104

Manufactured No

230

Each

8.0000

4.0000



Mirror Arm 369/500

BS5735 10-4-2010

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

8

40046

8

D2011-101

Manufactured No

230

Each

8.0000

4.0000



6" Mirror

BS6795 10-4-2010

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

8

53992

8

Wednesday, February 17, 2010 11:03:02 AM

Shop Packet Print

Page 2

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Comments: IPP Rev:A 04.02.18 New issue KJ/JLM
IPP Rev:B 06-04-28 Manufactured on Water Jet JLM
IPP Rev:C 08-06-10 as per ECN1195p DD verified by:EC

Start Date: 2/18/2010

Required Date: 4/2/2010

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ AN3-4A	Replacement	Mfg/ Purchased	Bin No	Primary	Last	Route 230	Unit of Each	Qty on 1,949.000	Remaining 16.0000	Qty	Date	Status
 Bolt											10-4-20	SP

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST	1949	
104214	422	16
104291	300	
104322	200	
104374	200	
104625	300	
104817	527	

AN526C1032R10

Purchased

No

230

Each

482.0000

16.0000



Screw

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST	482	
108062	123	
108167	35	
110049	324	16

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Shop Packet Print

Page 3

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IPP Rev:B 06-04-28 Manufactured on Water Jet JLM
IPP Rev:C 08-06-10 as per ECN1195p DD verified by:EC

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/	Replacement	Mfg/	Bin	Primary	Last	Route	Unit of	Qty on	Remaining	Qty	Date	Status
ALS4-1032-130		Purchased	No			230	Each	1,908.000	16.0000			



Insert

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

1908

110511

1908

AN960JD10L

Purchased

No

230

Each

3,457.000 16.0000



Washer

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

3457

101291

16

105793

49

110985

3392

111440710-4-20

10-4-20 51 (48)

16

Wednesday, February 17, 2010 11:03:02 AM

Shop Packet Print

Page 4

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

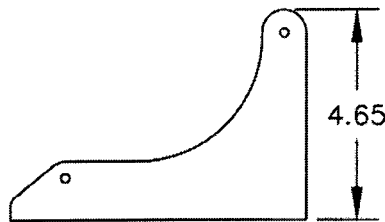
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DART

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO. D3243	REV. A SHEET 1 OF 1
DATE 04.01.09	TITLE BRACKET	SCALE 1:2	
A	04.01.09	NEW ISSUE	



R0.188 (TYP)



D3243-1 BEND DETAIL/
D3243-041 ASSEMBLY
SCALE 1:4

INSTALL
FE-032-EF INSERTS
(4 PLACES)

2.75^{+0.030}_{0.000}

11.920
11.420
Ø0.201
(TYP 4
PLACES)

RELEASED
04.02.03

8.581
8.206
7.706

GRAIN
DIRECTION

Ø0.290
(TYP 4
PLACES)

1.375

5.273

4.214
R0.25 (TYP)

3.339

R0.38
(TYP)

3.714

5.494
R2.75
(TYP)

**D3243-041 BRACKET ASSEMBLY
(D3243-1 BRACKET)**

- 1) MATERIAL: 6061-T6, 0.063 THICK
(QQ-A-250/11, REF DART SPEC
M6061T6S.063)
- 2) FINISH: CHEMICAL CONVERSION COAT
PER DART QSI 005 4.1
POWDER COAT BLACK (4.3.5.7) PER
DART QSI 005 4.3
- 3) BREAK ALL SHARP EDGES 0.005 TO
0.010
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) TOLERANCES ARE PER DART QSI 018
UNLESS OTHERWISE NOTED

D3243-1
FLAT PATTERN

R0.50
(TYP)

0.500
0.000
0.750
0.500
0.000

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REFERENCE ONLY

32.2 CARGO MIRROR REMOVAL

32.2.1 Remove the AN3 bolts securing the D3243-041 Bracket to the skidtube and remove the Cargo Mirror.

32.2.2 Reinstall the AN3-4A bolts in the inserts. The bolts should be sealed with Sikaflex-241/-291 or Proseal 890 or MIL-S-8802 Class 'B2' sealant before installing.

32.3 WEIGHT AND BALANCE

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D044-715-011	1.3 lb	41.7 in	54.2 lb-kG	32.0 in	41.6 in-lb
Cargo Mirror Installation	0.59 kg	1.06 m	0.63 m-kG	0.81 m	0.48 m-kG

32.4 PARTS LIST

Qty	Part Number	Description
X	D044-715-011	CARGO MIRROR INSTALLATION
2	D1048	Clamp
2	D1049	Saddle
1	D2010-104	Arm
1	D2011-101	Mirror
1	*D3014-1	Locknut
1	D3243-041	Bracket
4	ALS7-1032-130	Insert (or AKS7-1032-130, AKS4-1032-130, ALS4-1032-130)
4	AN3-4A	Bolt
4	AN526C1032R10	Screw (or AN526-1032R10)
4	AN960JD10L	Washers
1	*AN960JD416L	Washer

* PARTS ARE INCLUDED WITH D2011-101 MIRROR

TC Accepted

MAR 31 2004

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32-00-00

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